certain critical point or switch threshold. This insures a reliable source of power for the transmitter once the switch threshold is overcome. The higher the height of the Belleville, the greater the magnitude of the negative deflection and corresponding distress applied to the PZT material. Using a negative mechanical motion allows the activation process to be independent of the force applied to the Belleville. For a large Belleville, thinning part of the Belleville will increase the size of the spot needed to be pushed to obtain the maximum negative deflection of the PZT material.

In The Claims

Please cancel claims 1-6 and add new claims 7-10 shown below.

7. (New) A self-powered wireless switch comprising:

a wireless transmitter;

a switch including a Belleville washer; and

a piezoelectric element arranged to be distressed upon actuation of the switch by a user so as to produce power for operation of the wireless transmitter.

8. (New) The self-powered wireless switch of claim 7 further comprising:

a capacitor between the piezoelectric element and the wireless transmitter for storing energy produced when the piezoelectric element is distressed and providing the power for operation of the wireless transmitter.

9. (New) The self-powered wireless switch of claim 7 wherein the piezoelectric material is PZT.

10. (New) The self-powered wireless switch of claim 7 wherein the Belleville washer has a load-deflection curve such that every time when pushed beyond a switch threshold, the Belleville washer contacts the piezoelectric material with the same force.